SIRIO PLUS

Lung ventilator for emergency,

transport and intensive care

code: 09439

rev. 9.1 - 01/06/2012

Dimensions (W x H x D)	360 x 250 x 220mm (with handle)
Weight	6,5 Kg (without accessories)
Relative humidity (use)	30 - 95% RH
Temperature	From -10 to 40 °C
Protection level	IP 54
Air navigability	According to UNI EN 794-3
Automatic compensation of atmospheric pressure on measured pressure	Present (max. 5000 mt)

TECHNICAL DETAILS	
Functioning principles	Time cycled and constant volume Pressure cycled Microprocessor controlled flow Spontaneous breathing with integrated valve
Ventilation modes	IPPV, IPPV+AST, SIMV, CPAP, PSV, PCV, APNOEA Back-Up, manual breathing.
CPR mode	Pressure limited ventilation and non-constant volume (the airways pressure is limited but the volume is delivered during all the inspiration time)

Breathing frequency	From 5 to 140 bpm
SIMV - Breathing frequency	From 0 to 139 bpm
Tidal volume	From 0.05 to 2,0 L/min
I:E ratio	From 1:4 to 3:1
Inspiratory pause	From 0 to 50% of the inspiratory time
Inspiratory pressure limit	From 2 to 80 cmH_2O
PEEP	From 0 to 20 cmH_2O
Minute volume with 1:2 I/E ratio	From 1 to 25 L/min.
O2 concentration	Settings from 21 to 99% (with O_2 only source from 50 to 99%)
Trigger (sensibility)	Adjustable from off ; 1 to 9 cmH_2O under set PEEP level
Max. inspiratory flow	About 90 L/min.
Flow measuration range	From 1 to 120 L/min.
Pneumatic supply	O2 and Air - pressure included between 280 kPa and 600 kPa (2,8 – 6 bar)
Patient circuit	Non-Rebreathing
Flow sensor	By magnetic disturbance, sterilizable for several uses
Atmospheric compensation	Automatic

GAS CONSUMPTION

Control	About 1 L/min.
Minute Volume (with 50% O2 mixer)	40% of the minute volume set
Minute Volume (without air mixer)	100% of the minute volume set

MONITORING

The measured parameters are displayed on back-illuminated LCD monitor and divided into 4 pages	Flow, Max. Pressure, Mean, PEEP, Insp. Time, Exp. Time, Breathing Frequency, Exp Minute Volume, Exp. Tidal Volume

ALARMS

Low gas supply	The alarm occurs when the supply gas pressure is under 2 bar
High PAW	The alarm occurs when the pressure limit set is joined(the inspiratory flow is interrupted)
Low PAW	The alarm occurs if the low limit is not joined
High / Low expired Tidal Volume	The alarm occurs if the expired volume is higher / lower than the set one
High / Low expired Minute Volume	The alarm occurs if the expired volume is higher / lower than the set one
Apnoea	The alarm occurs in absence of breathing activity (the Apnoea back-up safety system intervenes)
High / Low frequency	The alarm occurs if the measured frequency is higher / lower than the set one
Power failure	Electric power failure alarm
Low battery	The alarm occurs if the battery voltage is lower than 10.5Vdc

POWER SUPPLY

Electric power	From 11 to 14 Vdc when supplied with a vehicle source or 230Vac if used with the supplied feeder
Power	40 W (230Vac - with the supplied feeder)
Internal electric power	12Vdc battery
Autonomy	3 hours max (9 hours with the optional Long Life Pack module)
Charging time	About 10 hours

CONFORMITY TO NORMS

IEC 601-1, IEC 601-1-2, IEC 601-1-4, EN 1281-1, EN 794-3, UNI EN 475, UNI EN 4135, DIR. 93/42/EEC	
Class and type according to IEC 601-1	Class 1 Type B
Class according to 93/42 EEC Directive	Class IIb

ACCESSORIES

Supplied Accessories	• O_2 tube • AIR tube • Feeder: 100/240Vac 50/60Hz- 13,8Vdc • Power cable • Power supply cable 12 Vdc • Disposable coaxial patient circuit • User's manual
Optional Accessories	See on Export Price List

SIARE applies the EN ISO 13485:2004 Quality System and the 93/42 EEC Medical Devices Directive.

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